CITY OF COURTENAY

DEVELOPMENT COST CHARGE BYLAW 2025

DRAFT BACKGROUND REPORT

JUNE 2025

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EXECUTIVE SUMMARY

In 2023, the City of Courtenay (City) initiated the process of updating their Development Cost Charges (DCC) Bylaw. The last major revision to the City's DCC Bylaw was completed in 2016, a few minor revisions were completed with the most recent consumer price index amendment to the DCC rates in the existing Development Cost Charges Bylaw No. 3164, 2024.

Given the availability of growth information from the City's ongoing Official Community Plan update, information on required projects identified through master plans, assessments, studies, the City's 5-year Financial Plan, and staff discussions, the City is well positioned to undertake the development of this DCC Bylaw. The development of this DCC Bylaw consisted of the following elements:

- Developing residential and non-residential growth estimates.
- Determining eligible DCC projects, calculating cost estimates, and identifying appropriate benefit allocation factors.
- Developing equivalencies to allocate costs fairly across land use types.
- Identifying land use categories to align with impact on infrastructure and current and future development trends in the City.
- Incorporating Provincial legislative changes into the City's development finance practices.

The proposed DCC program reflects a 1% municipal assist factor across all infrastructure categories. Proposed DCC rates are provided in Table ES 1.

Table ES 1: Proposed DCC Rates

Land Use	Unit of Charge	Transportation	Water	Drainage	Sewer	Parks	Fire	Proposed Rate (2025)
Low Density Residential	lot / dwelling unit	$3,603.00	$654.00	$1,192.00	$4,727.00	$8,686.00	$2,475.00	**$21,337.00**
Medium Density Residential	dwelling unit	$2,024.00	$356.00	$953.00	$2,574.00	$4,731.00	$1,348.00	**$11,986.00**
High Density Residential	m^2 gross floor area	$27.00	$4.18	$4.82	$30.29	$55.65	$15.86	**$137.80**
Commercial	m^2 gross floor area	$47.43	$1.36	$5.36	$9.85	$18.10	$5.16	**$87.26**
Institutional	m^2 gross floor area	$47.43	$1.36	$5.36	$9.85	$0.00	$5.16	**$69.16**
Industrial	m^2 gross floor area	$3.87	$0.88	$2.03	$6.33	$0.00	$3.31	**$16.42**

Note: The material provided in this Background Report is meant for information only. Reference should be made to Courtenay's Development Cost Charges Bylaw No. 3164, 2024, for the specific DCC rates until the new DCC Bylaw has been adopted.

1.0 BACKGROUND

The City of Courtenay's (City) existing Development Cost Charges Bylaw No. 3164 was last updated with a minor revision in 2024, with the major revision completed in 2016.

The City is in a strong position to develop this DCC bylaw given the availability of the Official Community Plan (substantively updates in 2022, and currently undergoing an update), various infrastructure assessments and plans, the 5-year Financial Plan, and discussions with staff to inform the project lists. Together, these documents provide new information on anticipated growth and infrastructure needed to service future development. The development of this DCC bylaw consisted of the following elements:

- Developing residential and non-residential growth estimates;
- Determining eligible DCC projects, calculating cost estimates, and identifying appropriate benefit allocation factors;
- Reviewing equivalencies to allocate costs fairly across land use types;
- Identifying land use categories to align with impact on infrastructure and development trends the City is experiencing now and into the future; and,
- Incorporating Provincial legislative changes into the City's development finance practices.

This DCC program was developed to be consistent with the following legislation, plans, and policy guides:

- *Local Government Act*
- Development Cost Charges Best Practices Guide, Ministry of Municipal Affairs
- Courtenay Development Cost Charges Bylaw No. 3164, 2024, and previous DCC Background Reports
- City of Courtenay Official Community Plan (2022), and current ongoing update
- City of Courtenay 5-year Financial Plan
- City of Courtenay infrastructure assessments and plans:
    - 2019 Connecting Courtenay Master Transportation Plan
    - Courtenay 2023 Cycling Network Plan Update
    - 2021 Water Master Plan
    - 2024 City of Courtenay Integrated Rainwater Management Plan – Phase 3
    - 2021 Sanitary Sewer Master Plan
    - 2019 Parks and Recreation Master Plan

The proposed DCC program includes DCC charges for the City's transportation, water, drainage, and sewer infrastructure, fire protection facilities, and for acquiring and improving parkland.

Please note that the material provided in this Background Report is meant for information only. Reference should be made to the City's Development Cost Charges Bylaw No. 3164, 2024, for the specific DCC rates until the new bylaw has been adopted.

2.0 DCC KEY ELEMENTS

The Development Cost Charge Best Practice Guide prepared by the Ministry of Municipal Affairs stipulates key elements that should be considered when determining DCC rates. Table 1 outlines the key elements, decisions, and supporting rationale used in this DCC program. The table also indicates whether the approach aligns with the Best Practices Guide.

Table 1: DCC Key Elements

Key Element	City 2025 DCC Program	Rationale	Aligns with Best Practices Guide?
Time Horizon	20 Years	• Aligns with ongoing OCP update, recent infrastructure assessments and plans	✓
City-wide or area-specific charge	City-wide charge	• All DCC projects are components of City-wide infrastructure systems and, therefore provide a City-wide benefit	✓
Grant Assistance	Yes	• Only for Transportation projects as indicated in Appendix A. • Projects with confirmed grants have been identified and netted off the cost estimates included in the DCC program.	✓
Developer Contribution	None	• No identified DCC projects include a developer contribution.	✓
Financing	No	• No identified DCC projects include financing.	✓

Benefit Allocation	25-100%	• For projects where both new and existing residents will benefit, benefit has been calculated based on capacity (where available), population, or rule of thumb as further outlined below:
		  ○ Transportation: 42-100% based on capacity and population change.
		  ○ Water, Sewer, and Drainage: 25-100% based on capacity, population change, and rule of thumb.
		  ○ Parkland Acquisition and Improvements: 25-100%, based on population change and rule of thumb.
		  ○ Fire Protection: 42% based on population change.
			✓

Key Element	City 2025 DCC Program	Rationale	Aligns with Best Practices Guide?
Municipal Assist Factor	1%	• The City is contributing 1% across all infrastructure categories.	✓
Units of charge	Per lot, per dwelling unit, and per square metre gross floor area	• *Per lot or dwelling unit* for low density residential uses. DCCs are levied on low density residential at time of subdivision or building permit as the case may be. • *Per dwelling unit* for medium density residential uses, at time of building permit. DCCs are levied at time of building permit when the number of units is known. • *Per square metre of gross floor area* for high density residential, commercial, and institutional uses as impact on infrastructure is expected to correlate most closely with floor space. DCCs are levied at time of building permit for these uses when the floor area is known.	✓

3.0 GROWTH PROJECTIONS AND EQUIVALENCIES

3.1 RESIDENTIAL GROWTH PROJECTIONS

Residential growth projections were pulled together for a 20-year time horizon. Total 20-year household and population growth are based on BC Stats household and population projections. The apportionment of units between Low Density Residential and Medium Density Residential is based on past development trends and small-scale multi-unit housing (SSMUH) forecasts provided in the *SSMUH and TOA Scenarios in British Columbia* (2023) report. Unit apportionment in the High Density Residential category is based on City of Courtenay OCP land use designations within primary and secondary Growth Centres and likelihood of redevelopment projections completed for the City of Courtenay Complete Communities Growth Assessment.

Residential growth projections by density type for the 20-year time horizon are shown below in **Table 2**.

Table 2: Residential Growth by Dwelling Type (20 years)

Dwelling Type	Number of New Units	Persons per Unit	New Population
Low Density Residential	650	3.36	2,184
Medium Density Residential	2,600	1.83	4,758
High Density Residential	3,200	1.60	5,120
Total	**6,450**	**-**	**12,062**

3.2 NON-RESIDENTIAL GROWTH PROJECTIONS

Growth projections for commercial, and institutional uses are based on historical building permit data, input from City staff, and expected future development trends. Growth projections for industrial use are based on a per capita calculation following the growth method outlined in the Development Cost Charges Best Practices Guide. This method includes accounting for remaining vacant industrial land in the City and adjusting for anticipated industrial development using a per capita calculation based anticipated population increases. Non-residential growth projections for the 20-year time horizon used in this DCC update are shown in **Table 3**.

Table 3: Non-Residential Growth by Land Use (20 years)

Land Use	New Development
Commercial	159,300
Institutional	27,100
Industrial	190,700
Total m^2 gross floor area	**377, 100**

3.3 EQUIVALENCIES

The equivalencies used to calculate DCC rates largely use the equivalencies calculated through previous DCC updates. Minor amendments were made to reflect the additional residential land uses.

Table 4: Equivalencies

Land Use	Transportation (Trip Rates)	Water / Sewer / Fire Protection (Equivalent Pop.)	Drainage (Impervious Area)	Parks (Equivalent Pop.)
Low Density Residential *(per lot/dwelling unit)*	10.43	3.36	1.00	3.36
Medium Density Residential *(per dwelling unit)*	5.86	1.83	0.80	1.83
High Density Residential *(per dwelling unit)*	5.81	1.60	0.30	1.60
Commercial *(per m^2 gross floor area)*	0.1373	0.0070	0.0045	0.0070
Institutional *(per m^2 gross floor area)*	0.1373	0.0070	0.0045	-
Industrial *(per m^2 gross floor area)*	0.0112	0.0045	0.0017	-

Transportation

For transportation projects, the cost of development is distributed based on the expected number of trips generated by each land use. Trip ends are based on the ITE Trip Generation Manual.

Water, Sewer, and Fire Protection

For residential demand, occupancy rates can be used to project demands for water and sewer infrastructure and fire protection. For non-residential land uses, equivalent populations per square meter are established.

Drainage

In general terms, the impact of developing a parcel of land on the storm drainage system is expressed as the amount of stormwater run-off that must be accommodated by the system. The accepted parameter for expressing imperviousness in stormwater run-off calculations is the “run-off coefficient.” The run-off coefficient reflects the ratio between the impervious area on a parcel and the total area of the parcel. Run-off coefficients are then used to calculate drainage equivalencies in relation to a low density residential primary dwelling unit.

Parks

Given the need for new park space and park development is generated largely by population increases and staff in the commercial sector, the City will levy Parks DCCs on all residential land use categories and on commercial land uses where population equivalent is used.

4.0 DCC PROJECTS AND COSTS

4.1 DCC PROJECTS

The DCC program was developed through discussions with City staff, by reviewing recent infrastructure assessments and the City's 5-year Financial Plan to identify growth-related projects. In addition, a broad overview of the existing DCC program was conducted: required projects that have not yet been built were carried forward with updated cost estimates. The types of projects included in the DCC program are as follows:

- Road upgrades, including active transportation improvements
- Water main upgrades and water supply improvements
- Storm main upgrades
- Culvert upgrades
- Sewer trunk main upgrades and lift station upgrades
- Parkland acquisition
- Park improvements
- Fire hall
- Studies

All projects included in the DCC program are owned and controlled by the City. A complete list of detailed projects, cost estimates, and rate calculations is provided in **Appendix A**.

4.2 DCC COSTS

DCC rates are determined by applying the key elements, growth projections, and equivalencies described earlier in this report to DCC-eligible projects expected to be built within the specified time horizon. An overview of the DCC costs by infrastructure type is provided below. Costs reflect 2024 dollars. All park improvement costs include only DCC eligible components for park development as outlined in Section 566(2)(b)(ii) of the *Local Government Act*.

Table 5: DCC Program Overview and Capital Costs

Service	Total Capital Cost ($Millions)	Benefit Allocation	Municipal Assist Factor	DCC Recoverable ($Millions)	Municipal Contribution ($Millions) [1]
Transportation	$73	42-100%	1%	$31	$42
Water	$6	42-100%	1%	$4	$2
Drainage	$19	25-100%	1%	$9	$10
Sewer	$26	50-100%	1%	$22	$4
Parks	$51	25-100%	1%	$36	$16
Fire	$25	42%	1%	$10	$15
Total [2]	**$200M**			**$112M**	**$88M**

[1] Includes municipal assist factor and portion allocated to existing development.
[2] Figures may not add due to rounding.

4.3 INTEREST ON LONG-TERM DEBT

No interest on long-term debt is included.

5.0 DCC RATES

A summary of the proposed DCC rates is included in **Table 6** below.

Table 6: Proposed DCC Rates

Land Use	Unit of Charge	Transportation	Water	Drainage	Sewer	Parks	Fire	Proposed Rate (2025)
Low Density Residential	lot / dwelling unit	$3,603.00	$654.00	$1,192.00	$4,727.00	$8,686.00	$2,475.00	**$21,337.00**
Medium Density Residential	dwelling unit	$2,024.00	$356.00	$953.00	$2,574.00	$4,731.00	$1,348.00	**$11,986.00**
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Industrial	m^2 gross floor area	$3.87	$0.88	$2.03	$6.33	$0.00	$3.31	**$16.42**

6.0 CONSULTATION AND DCC RATES

6.1 INTERESTED PARTIES' CONSULTATION

To be updated following consultation.

7.0 DCC IMPLEMENTATION

7.1 BYLAW EXEMPTIONS

The *Local Government Act (LGA)* is clear that a DCC cannot be levied if the proposed development does not impose new capital cost burdens on the City, or if a DCC has already been paid in regard to the same development. However, if further expansion for the same development creates new capital cost burdens or uses up capacity, the DCCs can be levied on the additional development to capture costs.

The *LGA* further restricts levying DCCs at the time of building permit issuance if:

- The building permit is for a place of public worship as per the *Community Charter*; or
- The value of the work authorized by the building permit does not exceed $50,000 or a higher amount as prescribed by bylaw; or
- Unit size is no larger than 29 sq. m. (or a greater area prescribed by bylaw) and only for residential use.

The City will maintain the thresholds as set out by the *LGA* and will not charge on building permits less than $50,000 in value or for residential units no larger than 29 sq. m. Legislation allows local governments to charge DCCs at building permit on residential developments of fewer than four self-contained dwelling units, if such a charge is provided for in the local government's DCC bylaw. The City will charge DCCs on fewer than four self-contained dwelling units at building permit.

7.2 DCC WAIVERS AND REDUCTIONS

The *LGA* provides local governments the discretionary authority to waive or reduce DCCs for certain types of development to promote affordable housing and low environmental impact development. The Best Practices Guide specifies the DCC program must remain whole which means for any waivers or reductions the City provides, this same value must be paid to the DCC reserves from municipal funds, not paid for by the rest of the development community. Waivers and reductions are typically defined in a DCC Waivers and Reduction Bylaw, separate from the DCC Bylaw as it does not need approval by the Inspector of Municipalities. At this time, the City has a Development Cost Charges Waiver (Affordable Housing) Bylaw No. 3118, which is set to expire after June 1, 2027.

7.3 COLLECTION OF CHARGES

Local governments can choose to collect DCCs at time of subdivision approval or building permit issuance, whichever comes first. The City will collect DCCs for Low Density Residential uses at time of subdivision approval or building permit, as the case may be. Collecting DCCs early will allow the City to ensure timely provision of infrastructure and services. DCCs for other residential land use categories will be collected at time of building permit. Non-residential land uses will also be levied DCCs at time of building permit when floor area will be known.

7.4 COLLECTION OF DCCS ON REDEVELOPED OR EXPANDED DEVELOPMENTS

When an existing building or development undergoes an expansion or redevelopment there is usually a need for additional DCC related infrastructure. The new developer / builder should pay the applicable DCCs based on the additional floor area for commercial, industrial, or institutional land uses at the DCC

rates in the then-current DCC bylaw. In essence, the City is giving a DCC credit for the existing development or building. DCCs are only levied on the *new* development/ building area.

7.5 IN-STREAM APPLICATIONS

Once the new DCC Bylaw has been adopted, the *LGA* provides special protection from rate increases for development applications that are submitted prior to the adoption date. There are two ways a developer can qualify for exclusion from the new DCC rates:

1. Pursuant to section 511 of the *LGA* (subdivision).

   If the new DCC Bylaw is adopted after a subdivision application is submitted and the applicable subdivision fee is paid, the new DCC Bylaw has no application to the subdivision for 12 months after the DCC Bylaw is adopted. As such, if the subdivision is approved during the 12 months' in-stream period, the previous DCC rates apply. This only applies in cases where DCCs are levied at subdivision.

OR

2. Pursuant to section 568 of the *LGA* (building permits).

   The new DCC Bylaw is not applicable to a construction, alteration, or extension if: (a) a building permit is issued within 12 months of the new DCC Bylaw adoption, AND (b) either a building permit application, a development permit application or a rezoning application associated with the construction (defined as "precursor application") is in stream when the new DCC Bylaw is adopted, and the applicable application fee has been paid. The development authorized by the building permit must be entirely within the area subject to the precursor application.

The above is a summary of sections 511 and 568 of the *LGA* and not an interpretation or an explanation of these sections. Developers are responsible for complying with all applicable laws and bylaws and seeking legal advice as needed.

Note: One-year in-stream protection is based on the adoption date of the DCC bylaw, not the effective date.

7.6 CONTINUOUS IMPROVEMENT RECOMMENDATIONS

Rebates and Credits

The City should establish a policy to guide staff in the collection of DCCs and the use of DCC credits and rebates as stipulated in the *LGA* and referenced in the DCC Best Practice Guide. There may be situation in which it is not in the best interests of the City to allow an owner to build DCC services outside their subdivision or development. Building such services may start or accelerate development in areas where the City is not prepared to support, or DCC reserves are not sufficient. Policies for DCC credits, rebates, and latecomer agreements are often drafted to assist staff in development financing.

DCC Monitoring and Accounting

The City should enter all the projects contained in the DCC program into a tracking system to monitor the DCC program. The tracking system would monitor the status of the project from the conceptual stage through to its final construction. The tracking system would include information about the estimated costs, the actual construction costs, and the funding sources for the projects. The construction costs would be informed by the tender prices received, and the land costs based on the actual price of utility areas and or other land and improvements required for servicing purposes. The tracking system would indicate when projects are completed, or partially completed, their actual costs, and would include new projects that are added to the program.

DCC Reviews

To keep the DCC program as current as possible, the City may review its program annually. Based on its annual review, the City may make minor amendments to the DCC rates. The City may apply a CPI inflationary factor, as permitted by legislation, annually (to a maximum of four years). Typically, a major amendment to the DCC program and rates is recommended every three to five years. All DCC Bylaw amendments require approval from the Ministry, with the exception of CPI adjustments.

APPENDIX A

DCC Program and Calculations

CITY OF COURTENAY
TRANSPORTATION DCC PROGRAM

DCC Project ID	Col. (1)		Col. (2)		Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Description	Cost Estimate (Excl. Grants 2024$)	Grants	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
T-001	Transportation Master Plan		$750,000		$750,000	100%	$750,000	$7,500	$742,500	$7,500
Road Upgrades										
T-002	Signal upgrade & improvement program	5th Street and Cliffe Avenue; Old Island Highway & Comox Road; 6th Street & Cliffe Avenue; 8th Street & Cliffe Avenue; 8th Street & Fitzgerald Avenue	$2,300,000		$2,300,000	42%	$966,000	$9,660	$956,340	$1,343,660
T-003	5 year Intersection controls & upgrades progam	5th Street and Cliffe Avenue; Old Island Highway & Comox Road; Back Road & Tunner Drive	$2,200,000		$2,200,000	42%	$924,000	$9,240	$914,760	$1,285,240
T-004	Ryan Road Widening	Old Island Highway to 19A bypass	$3,000,000		$3,000,000	42%	$1,260,000	$12,600	$1,247,400	$1,752,600
T-005	10 year Intersection control & Upgrade Program	5 additional Intersections	$3,700,000		$3,700,000	42%	$1,554,000	$15,540	$1,538,460	$2,161,540
T-006	Lerwick Road	Malahat Drive to Valley View Drive	$3,600,000		$3,600,000	42%	$1,512,000	$15,120	$1,496,880	$2,103,120
T-007	Intersection Improvements - VMP and Old Island Highway		$1,000,000		$1,000,000	42%	$420,000	$4,200	$415,800	$584,200
T-008	Intersection Improvments - Mansfield Road and Cliffe Ave.		$606,959		$606,959	42%	$254,923	$2,549	$252,374	$354,585
T-009	Intersection Improvements - Old Island Highway and Muir Road		$606,959		$606,959	42%	$254,923	$2,549	$252,374	$354,585
T-010	Ryan Road Road Widening (MoTI jurisdiction)		$3,000,000		$3,000,000	42%	$1,260,000	$12,600	$1,247,400	$1,752,600
T-011	Back Rd. from South City limit to Ryan Rd.		$2,654,219		$2,654,219	42%	$1,114,772	$11,148	$1,103,624	$1,550,595
T-012	Lerwick Rd. from McDonald to Ryan Rd.	Final asphalt lift	$2,461,302		$2,461,302	42%	$1,033,747	$10,337	$1,023,409	$1,437,893
T-013	Intersection Island Hwy and Fraser Rd		$674,399		$674,399	42%	$283,248	$2,832	$280,415	$393,984
Cycling Upgrades										
T-014	6th Street Pedestrian / Bicycle Bridge		$6,900,000	$3,540,000	$3,360,000	42%	$1,411,200	$14,112	$1,397,088	$1,962,912
T-015	6th Street		$8,682,847		$8,682,847	42%	$3,646,796	$36,468	$3,610,328	$5,072,519
T-016	Lake Trail Road		$1,660,000	$686,000	$974,000	42%	$409,080	$4,091	$404,989	$569,011
T-017	Fitzgerald Ave Protected Bike Lanes		$5,800,000		$5,800,000	42%	$2,436,000	$24,360	$2,411,640	$3,388,360
T-018	Lerwick Road Protected Bike Lanes		$10,230,000		$10,230,000	42%	$4,296,600	$42,966	$4,253,634	$5,976,366
T-019	Old Island Hwy Protected Bike Lanes		$3,120,000		$3,120,000	42%	$1,310,400	$13,104	$1,297,296	$1,822,704
T-020	Back Road Protected Bike Lanes	Ryan Road to 6th Street	$2,090,000		$2,090,000	42%	$877,800	$8,778	$869,022	$1,220,978
T-021	Cycling Plan Update	City-Wide	$150,000		$150,000	42%	$63,000	$630	$62,370	$87,630
Pedestrian Upgrades										
T-022	Ryan Road Sidewalk	Sandwick Road to Hunt Road	$2,000,000		$2,000,000	42%	$840,000	$8,400	$831,600	$1,168,400
T-023	1st Street	Embleton Crescent to Menzies Avenue	$1,440,000		$1,440,000	42%	$604,800	$6,048	$598,752	$841,248
T-024	Cumberland Road	Piercy Avenue to McPhee Avenue	$300,000		$300,000	42%	$126,000	$1,260	$124,740	$175,260
T-025	Cumberland Road	Burgess Road to Willemar Avenue	$710,000		$710,000	42%	$298,200	$2,982	$295,218	$414,782
T-026	Back Road	Tunner Drive to 10th Street East	$1,000,000		$1,000,000	42%	$420,000	$4,200	$415,800	$584,200
T-027	10th Street	Back Road to Hobson Avenue	$300,000		$300,000	42%	$126,000	$1,260	$124,740	$175,260
T-028	Kilpatrick Avenue	26th Street to 29th Street	$440,000		$440,000	42%	$184,800	$1,848	$182,952	$257,048
T-029	Fitzgerald Avenue	21st Street to north of 26th Street	$470,000		$470,000	42%	$197,400	$1,974	$195,426	$274,574
T-030	Valley View Drive	Thorpe Avenue to Lerwick Road	$680,000		$680,000	42%	$285,600	$2,856	$282,744	$397,256
T-031	Lerwick Road	Lerwick Nature Park to McDonald Road	$530,000		$530,000	42%	$222,600	$2,226	$220,374	$309,626
T-032	Pedestrian Network Plan	City-Wide	$150,000		$150,000	100%	$150,000	$1,500	$148,500	$1,500
T-033	Morrison Creek / Arden Road crossing		$3,880,000		$3,880,000	42%	$1,629,600	$16,296	$1,613,304	$2,266,696
TOTALS			**$77,086,685**	**$4,226,000**	**$72,860,685**		**$31,123,488**		**$30,812,253**	**$42,048,432**

CITY OF COURTENAY
TRANSPORTATION DCC CALCULATIONS

A: Transportation DCC Calculation					
Land Use	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)	Col. (5) = (4) / (a)
	Estimated New Development	Unit	Wt. Trip Rate	Trip Ends	% Trip Ends
Low Density Residential	650	lot or dwelling unit	10.43	6,780	10%
Medium Density Residential	2,600	unit	5.86	15,236	22%
High Density Residential	3,200	unit	5.81	18,592	27%
Commercial	159,300	sq. m. gross floor area	0.1373	21,872	32%
Institutional	27,100	sq. m. gross floor area	0.1373	3,721	5%
Industrial	190,700	sq. m. gross floor area	0.0112	2,136	3%
			Total Trip Ends	68,336 (a)	100%

B: Unit Transportation DCC Calculation		
Net Transportation DCC Program Recoverable	$30,812,253	(b)
Existing DCC Reserve Monies	$7,207,276	(c)
Net Amount to be Paid by DCCs	$23,604,977	(d) = (b) - (c)
DCC per Trip End	$345.42	(e) = (d) / (a)

C: Resulting Transportation DCCs				DCC Revenue Estimates
Low Density Residential	$3,603.00	per lot or dwelling unit	(e) x Col. (3)	$2,341,950
Medium Density Residential	$2,024.00	per dwelling unit	(e) x Col. (3)	$5,262,400
High Density Residential	$2,007.00 *$27.00*	per dwelling unit *per sq. m. gross floor area*	(e) x Col. (3)	$6,422,400
Commercial	$47.43	per sq. m. gross floor area	(e) x Col. (3)	$7,555,599
Institutional	$47.43	per sq. m. gross floor area	(e) x Col. (3)	$1,285,353
Industrial	$3.87	per sq. m. gross floor area	(e) x Col. (3)	$738,009

CITY OF COURTENAY
WATER DCC PROGRAM

DCC Project ID	Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
W-001	South Hwy 19A (WAT009)	$1,984,000	50%	$992,000	$9,920	$982,080	$1,001,920
W-002	New PRV Connection to 87 Zone (WAT010)	$500,000	100%	$500,000	$5,000	$495,000	$5,000
W-003	South Courtenay PRV and Booster Station (WAT010) - Beachwood	$750,000	100%	$750,000	$7,500	$742,500	$7,500
W-004	District Metering (WAT011)	$1,600,000	42%	$672,000	$6,720	$665,280	$934,720
W-005	Water Master Plan Update	$900,000	100%	$900,000	$9,000	$891,000	$9,000
TOTALS		**$5,734,000**		**$3,814,000**	**$38,140**	**$3,775,860**	**$1,958,140**

CITY OF COURTENAY
WATER DCC CALCULATIONS

A: Waterworks DCC Calculation					
	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)	Col. (5) = (4) / (a)
Land Use	Estimated New Development	Unit	Person per unit (residential)/ Equivalent Population/m2 (other land uses)	Multiple	% Population Equivalent
Low Density Residential	650	lot or dwelling unit	3.36	2,184	15%
Medium Density Residential	2,600	unit	1.83	4,758	33%
High Density Residential	3,200	unit	1.60	5,120	36%
Commercial	159,300	sq. m. gross floor area	0.0070	1,115	8%
Institutional	27,100	sq. m. gross floor area	0.0070	190	1%
Industrial	190,700	sq. m. gross floor area	0.0045	858	6%
			Total Equivalent Population	14,225 (a)	100%

B: Unit Waterworks DCC Calculation			
Net Water DCC Program Recoverable	$3,775,860	(b)	
Existing DCC Reserve Monies	$1,008,850	(c)	
Net Amount to be Paid by DCCs	$2,767,010	(d) = (b) - (c)	
DCC per Person	$194.52	(e) = (d) / (a)	

C: Resulting Waterworks DCCs				DCC Revenue Estimates
Low Density Residential	$654.00	per lot or dwelling unit	(e) x Col. (3)	$425,100
Medium Density Residential	$356.00	per dwelling unit	(e) x Col. (3)	$925,600
High Density Residential	$311.00	per dwelling unit	(e) x Col. (3)	$995,200
	$4.18	*per sq. m. gross floor area*		
Commercial	$1.36	per sq. m. gross floor area	(e) x Col. (3)	$216,648
Institutional	$1.36	per sq. m. gross floor area	(e) x Col. (3)	$36,856
Industrial	$0.88	per sq. m. gross floor area	(e) x Col. (3)	$167,816

CITY OF COURTENAY
DRAINAGE DCC PROGRAM

DCC Project ID	Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
D-001	Storm main - 5th Street from Cliffe Aver to Courtenay River	$2,922,840	42%	$1,227,593	$12,276	$1,215,317	$1,707,523
D-002	Creek Culvert - Glen Urquhart Creek at 10th Street E	$796,950	42%	$334,719	$3,347	$331,372	$465,578
D-003	Creek Culvert - Morrison Creek Crossing 1st Street	$722,430	42%	$303,421	$3,034	$300,386	$422,044
D-004	Creek Culvert - Piercy Creek Crossing on Cumberland Road	$5,584,860	42%	$2,345,641	$23,456	$2,322,185	$3,262,675
D-005	Creek Culvert - Piercy Creek Crossing on Arden Road	$1,691,190	42%	$710,300	$7,103	$703,197	$987,993
D-006	Creek Culverts - Glen Urquhart Creek at Back Road	$1,732,590	42%	$727,688	$7,277	$720,411	$1,012,179
D-007	Creek Culvert - Piercy Creek Crossing at 20th Street	$600,300	42%	$252,126	$2,521	$249,605	$350,695
D-008	Storm main at the end of Sussex Dr	$534,060	42%	$224,305	$2,243	$222,062	$311,998
D-009	Glen Urquhart Creek Crossing at Thorpe Ave	$917,010	42%	$385,144	$3,851	$381,293	$535,717
D-010	Drainage Master Plan	$300,000	100%	$300,000	$3,000	$297,000	$3,000
D-011	Detention Pond in area of Cumberland Rd. and 20th St, W of Cousins	$842,999	50%	$421,500	$4,215	$417,285	$425,714
D-012	Piercy Creek Pond at Ronson Rd.	$1,315,078	75%	$986,309	$9,863	$976,445	$338,633
D-013	Enlarge ex. Detention Pond Within the Park 111 Site MH 31-023	$155,112	25%	$38,778	$388	$38,390	$116,722
D-014	Channel Bank Improvements/Retaining Walls Upstream of Aston Pl	$87,672	25%	$21,918	$219	$21,699	$65,973
D-015	Pond at downstream end of Catchment (Ducks Unlimited Property)	$330,455	25%	$82,614	$826	$81,788	$248,667
D-016	Lerwick Rd Extension Pond - 'Poje" property	$674,399	75%	$505,799	$5,058	$500,741	$173,658
TOTALS		**$19,207,945**		**$8,867,854**	**$88,679**	**$8,779,175**	**$10,428,770**

CITY OF COURTENAY
DRAINAGE DCC CALCULATION

A: Storm Drainage DCC Calculation					
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**	**Col. (5) = (4) / (a)**
	Estimated New Development	**Unit**	**Equivalence Factor**	**Multiple**	**% Population Equivalent**
Low Density Residential	650	lot or dwelling unit	1.00	650	13%
Medium Density Residential	2,600	unit	0.80	2,080	43%
High Density Residential	3,200	unit	0.30	960	20%
Commercial	159,300	sq. m. gross floor area	0.0045	717	15%
Institutional	27,100	sq. m. gross floor area	0.0045	122	3%
Industrial	190,700	sq. m. gross floor area	0.0017	324	7%
			Total Equivalent Population	4,853 (a)	100%

B: Unit Drainage DCC Calculation		
Net Drainage DCC Program Recoverable	$8,779,175	(b)
Existing DCC Reserve Monies	$2,995,431	(c)
Net Amount to be Paid by DCCs	$5,783,744	(d) = (b) - (c)
DCC per Equivalent Drainage Unit	$1,191.79	(e) = (d) / (a)

C: Resulting Drainage DCCs				**DCC Revenue Estimates**
Low Density Residential	$1,192.00	per lot or dwelling unit	(e) x Col. (3)	$774,800
Medium Density Residential	$953.00	per dwelling unit	(e) x Col. (3)	$2,477,800
High Density Residential	$358.00	per dwelling unit	(e) x Col. (3)	$1,145,600
	$4.82	*per sq. m. gross floor area*		
Commercial	$5.36	per sq. m. gross floor area	(e) x Col. (3)	$853,848
Institutional	$5.36	per sq. m. gross floor area	(e) x Col. (3)	$145,256
Industrial	$2.03	per sq. m. gross floor area	(e) x Col. (3)	$387,121

CITY OF COURTENAY
SANITARY SEWER DCC PROGRAM

DCC Project ID	Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
S-001	Greenwood - Trunk Sewer Extension (SEW001) - Outstanding DCC Debt (Principal)	$575,000	100%	$575,000	$0	$575,000	$0
S-002	Fitzgerald Ave - Trunk Sewer (SEW005)	$5,000,000	100%	$5,000,000	$50,000	$4,950,000	$50,000
S-003	East Courtenay Lift Station & Forcemain (SEW008)	$3,000,000	100%	$3,000,000	$30,000	$2,970,000	$30,000
S-004	Veterans Memorial Parkway Lift Station and Forcemain (SEW009)	$2,500,000	100%	$2,500,000	$25,000	$2,475,000	$25,000
S-005	Arden North - Trunk Sewer (SEW012)	$3,000,000	100%	$3,000,000	$30,000	$2,970,000	$30,000
S-006	Sewer Master Plan Update and Implementation Study	$300,000	100%	$300,000	$3,000	$297,000	$3,000
S-007	South Courtenay Sewer L/s and Forcemain u/s of S-009 trunk	$6,000,000	75%	$4,500,000	$45,000	$4,455,000	$1,545,000
S-008	South Courtenay Sewer Trunk Main (26th to 20th) (SEW003)	$3,217,000	75%	$2,412,750	$24,128	$2,388,623	$828,378
S-009	Puntledge Road Trunk Main Upgrade	$2,200,000	50%	$1,100,000	$11,000	$1,089,000	$1,111,000
TOTALS		**$ 25,792,000**		**$ 22,387,750**	**$ 218,128**	**$ 22,169,623**	**$ 3,622,378**

CITY OF COURTENAY
SANITARY SEWER DCC CALCULATION

A: Sanitary Sewer DCC Calculation					
	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)	Col. (5) = (4) / (a)
Land Use	Estimated New Development	Unit	Person per unit (residential)/ Equivalent Population/land area (other land uses)	Multiple	% Population Equivalent
Low Density Residential	650	lot or dwelling unit	3.36	2,184	15%
Medium Density Residential	2,600	unit	1.83	4,758	33%
High Density Residential	3,200	unit	1.60	5,120	36%
Commercial	159,300	sq. m. gross floor area	0.0070	1,115	8%
Institutional	27,100	sq. m. gross floor area	0.0070	190	1%
Industrial	190,700	sq. m. gross floor area	0.0045	858	6%
			Total Equivalent Population	14,225 (a)	100%

B: Unit Sanitary Sewer DCC Calculation			
Net Sewer DCC Program Recoverable	$22,169,623	(b)	
Existing DCC Reserve Monies	$2,157,994	(c)	
Net Amount to be Paid by DCCs	$20,011,629	(d) = (b) - (c)	
DCC per Person	$1,406.80	(e) = (d) / (a)	

C: Resulting Sanitary Sewer DCCs				DCC Revenue Estimates
Low Density Residential	$4,727.00	per lot or dwelling unit	(e) x Col. (3)	$3,072,550
Medium Density Residential	$2,574.00	per dwelling unit	(e) x Col. (3)	$410,038,200
High Density Residential	$2,251.00	per dwelling unit	(e) x Col. (3)	$61,002,100
	$30.29	*per sq. m. gross floor area*		
Commercial	$9.85	per sq. m. gross floor area	(e) x Col. (3)	$1,569,105
Institutional	$9.85	per sq. m. gross floor area	(e) x Col. (3)	$266,935
Industrial	$6.33	per sq. m. gross floor area	(e) x Col. (3)	$1,207,131

CITY OF COURTENAY
PARKS DCC PROGRAM

DCC Project ID	Col. (1)		Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Description	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
P-001	Park Acquisition		$22,388,196	100%	$22,388,196	$223,882	$22,164,314	$223,882
P-002	Trail Acquisition		$909,804	100%	$909,804	$9,098	$900,706	$9,098
P-003	Harmston Park Upgrades		$1,275,000	75%	$956,250	$9,563	$946,688	$328,313
P-004	Bill Moore Park Upgrades		$1,650,000	25%	$412,500	$4,125	$408,375	$1,241,625
P-005	Crown Isle Park Upgrades		$1,650,000	75%	$1,237,500	$12,375	$1,225,125	$424,875
P-006	Community Park Development	Includes 7 community park upgrades	$14,000,000	42%	$5,880,000	$58,800	$5,821,200	$8,178,800
P-007	Community Park Playgrounds	Includes 7 playgrounds	$5,250,000	42%	$2,205,000	$22,050	$2,182,950	$3,067,050
P-008	Community Trail Development		$3,746,327	42%	$1,573,457	$15,735	$1,557,723	$2,188,604
P-009	Parks Master Plan		$400,000	100%	$400,000	$4,000	$396,000	$4,000
TOTALS			**$51,269,327**		**$35,962,707**	**$359,627**	**$35,603,080**	**$15,666,247**

CITY OF COURTENAY
PARKS DCC CALCULATION

A: Parks DCC Calculation					
	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)	Col. (5) = (4) / (a)
Land Use	**Estimated New Development**	**Unit**	**Person per unit (residential)/ Equivalent Population/m2 (other land uses)**	**Multiple**	**% Population Equivalent**
Low Density Residential	650	lot or dwelling unit	3.36	2,184	17%
Medium Density Residential	2,600	unit	1.83	4,758	36%
High Density Residential	3,200	unit	1.60	5,120	39%
Commercial	159,300	sq. m. gross floor area	0.0070	1,115	8%
Institutional	27,100	sq. m. gross floor area	0.0000	-	0%
Industrial	190,700	sq. m. gross floor area	0.0000	-	0%
			Total Equivalent Population	13,177 (a)	100%

B: Unit Parks DCC Calculation		
Net Parks DCC Program Recoverable	$35,603,080	(b)
Existing DCC Reserve Monies	$1,539,227	(c)
Net Amount to be Paid by DCCs	$34,063,853	(d) = (b) - (c)
DCC per Person	$2,585.08	(e) = (d) / (a)

C: Resulting Parks DCCs				DCC Revenue Estimates
Low Density Residential	$8,686.00	per lot or dwelling unit	(e) x Col. (3)	$5,645,900
Medium Density Residential	$4,731.00	per dwelling unit	(e) x Col. (3)	$12,300,600
High Density Residential	$4,136.00 *$55.65*	per dwelling unit *per sq. m. gross floor area*	(e) x Col. (3)	$13,235,200
Commercial	$18.10	per sq. m. gross floor area	(e) x Col. (3)	$2,883,330
Institutional	$0.00	per sq. m. gross floor area	(e) x Col. (3)	$0
Industrial	$0.00	per sq. m. gross floor area	(e) x Col. (3)	$0

CITY OF COURTENAY
FIRE FACILITIES DCC PROGRAM

DCC Project ID	Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5) = Col. (4) x MAF	Col. (6) = Col. (5) - Col. (4)	Col. (7) = Col. (2) - Col. (6)
	Project Name	Cost Estimate (2024$)	Benefit Factor %	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
F-001	New East Courtenay Fire Hall	$25,201,000	42%	$10,584,420	$105,844	$10,478,576	$14,722,424
TOTALS		**$25,201,000**		**$10,584,420**	**$105,844**	**$10,478,576**	**$14,722,424**

CITY OF COURTENAY
FIRE FACILITIES DCC CALCULATION

A: Fire DCC Calculation					
	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)	Col. (5) = (4) / (a)
Land Use	**Estimated New Development**	**Unit**	**Person per unit (residential)/ Equivalent Population/m2 (other land uses)**	**Multiple**	**% Population Equivalent**
Low Density Residential	650	lot or dwelling unit	3.36	2,184	15%
Medium Density Residential	2,600	unit	1.83	4,758	33%
High Density Residential	3,200	unit	1.60	5,120	36%
Commercial	159,300	sq. m. gross floor area	0.0070	1,115	8%
Institutional	27,100	sq. m. gross floor area	0.0070	190	1%
Industrial	190,700	sq. m. gross floor area	0.0045	858	6%
			Total Equivalent Population	14,225 (a)	100%

B: Unit Fire DCC Calculation		
Net Fire DCC Program Recoverable	$10,478,576	(b)
Existing DCC Reserve Monies	$0	(c)
Net Amount to be Paid by DCCs	$10,478,576	(d) = (b) - (c)
DCC per Person	$736.63	(e) = (d) / (a)

C: Resulting Fire DCCs				**DCC Revenue Estimates**
Low Density Residential	$2,475.00	per lot or dwelling unit	(e) x Col. (3)	$1,608,750
Medium Density Residential	$1,348.00	per dwelling unit	(e) x Col. (3)	$3,504,800
High Density Residential	$1,179.00	per dwelling unit	(e) x Col. (3)	$3,772,800
	$15.86	*per sq. m. gross floor area*		
Commercial	$5.16	per sq. m. gross floor area	(e) x Col. (3)	$821,988
Institutional	$5.16	per sq. m. gross floor area	(e) x Col. (3)	$139,836
Industrial	$3.31	per sq. m. gross floor area	(e) x Col. (3)	$631,217

APPENDIX B

Courtenay Development Cost Charge Bylaw No. #### (2025)